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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,966	07/27/2007	David Murray Cross	CB60576	6584

20462 7590 09/09/2008
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EXAMINER

BOATENG, ALEXIS ASIEDUA

ART UNIT	PAPER NUMBER
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2838

NOTIFICATION DATE	DELIVERY MODE
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09/09/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

US_cipkop@gsk.com

Office Action Summary	Application No.	Applicant(s)	
	10/577,966	CROSS ET AL.	
	Examiner	Art Unit	
	Alexis Boateng	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/02/06; 10/26/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 5 recites the broad recitation a combination of claim 4, which recites wherein the capacitor has a capacity of 15 - 50 Farad and the claim (5) also recites wherein the capacitor has a capacity of 16 – 22 Farad, which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 16, 20, and 22 – 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klinger (U.S. 5,561,881) in view of Yang (U.S. 6,437,544).

Regarding claims 1, 20, and 22 - 25, Klinger discloses an electrically powered toothbrush comprising a head which supports a bristle carrier, the head being connected to or connectable to a grip handle, the bristle carrier being moveable by an electric motor in the toothbrush to provide a cleaning effect (figure 1).

in combination with a charging unit (figure 1 item 200) which incorporates an electricity supply (figure 1 item 220) comprising one or more replaceable or rechargeable battery cell (figure 1 item 24: it is obvious that power the system receives from an electrical outlet maybe modified to be a rechargeable battery cell, since they are analogous power sources), and having an electrical connection means (figure 1 item 160) connectable to a corresponding connection on the toothbrush to enable electrical connection. Klinger does not disclose wherein incorporating an electric power supply which comprises a capacitor capable of containing sufficient electric charge to drive the motor for a tooth cleaning session, nor wherein a connection is established between the capacitor and the charging station, and with which the toothbrush may be connected.

Yang discloses in figure 1 wherein item 105 is a capacitor, super capacitor, or the like used to provide charge to a load. The load device, item 104, uses a rechargeable storage device, item 106, to drive the load. It is obvious that the rechargeable device may be a super capacitor as it is well

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known that a super capacitor is a rechargeable device. Additionally, it would have been obvious to rearrange the rechargeable devices, the super capacitor and the battery, so that device is provided with more power, since it has been held that rearranging parts of an invention involves on routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claims 2 - 14, Klinger in view of Yang discloses wherein the capacitor provides electric power sufficient to drive the motor for a tooth cleaning session. It is obvious that the capacitor in the Yang system may substitute the battery in figure 1 item 110 of the Klinger system, which drives the motor of the toothbrush. Klinger nor Yang discloses wherein the tooth cleaning session lasts for two minutes or more, a specific capacity and output voltage. I would have been obvious to a person of ordinary skill in the art to modify the Klinger and Yang system with a capacitor with a specific capacity and output voltage that adheres to the user's specifics. *In Re Bosch*, 617 F.2d 272, 205 USPQ.

Regarding claim 15, Klinger does not disclose wherein multiple cells are used within the system. It would have been obvious to a person of ordinary skill in the art to modify the Klinger system with multiple cells so that additional charge is stored and provided for the system, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

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Regarding claim 16, Klinger discloses wherein the charging unit or toothbrush includes a resistor in series with the replaceable or rechargeable cells when they deliver V1 (column 5 line 62 – column 6 lines 28).

4. Claims 17 - 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klinger (U.S. 5,561,881) in view of Yang (U.S. 6,437,544) as applied to claim 1 and in further view of Lundell (U.S. 6,140,802).

Regarding claims 17 – 19, Klinger and Yang do not disclose the system as claimed. Lundell discloses in column 3 lines 30 – 53 wherein the charging unit is constructed to derive a charging and boost voltages to V1 and V2 from the supply. Lundell discloses different levels to which the voltage is increased which may be V1 and V2 levels. Figure 5 discloses wherein in step 106 the system is timed out if the toothbrush is not used. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Klinger and Yang system with the Lundell system so that optimum power is provided.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klinger (U.S. 5,561,881) in view of Yang (U.S. 6,437,544) as applied to claim 21 and in further view of Pai (U.S. 5,721,273).

Regarding claim 21, Yang and Klinger do not disclose the invention as claimed. Pai discloses in column 3 lines 55 – 57 wherein a Nickel cadmium battery may be used. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Yang and Klinger system to provide optimum charging.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexis Boateng whose telephone number is (571) 272-5979. The examiner can normally be reached on 8:30 am - 6:00 pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm I. Ullah can be reached on (571) 272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AB

/Edward tso/

Primary examiner